



Why Do Projects Fail?



Don't we all wish that there were a simple answer to this question? Despite the many opinions, nobody has a straightforward answer that really applies to all projects. The articles in this issue, and many other articles that I reviewed, point to two facts: First, everyone has a theory on why programs fail, and second, there is no singular cause that universally applies. It is, frankly, surprising that the variety of statistics and articles on project failures have little in common. There were, however, a few – just a few – common denominators to project failures. But since I am a glass-is-half-full kind of guy, I would rather view this topic from the side of success. Although I suspect there are more, I only found three common denominators that were consistently mentioned in several articles that I read as key to a project's success, requirements management being the first common denominator. Success was not just defined by well-documented technical requirements, but well-defined programmatic requirements/thresholds. Most articles specifically note requirements creep as a challenge for projects. The driving forces behind requirements creep exist in many forms, and every project should have a systems engineering strategy to manage requirements, which is a good lead to the second common denominator: risk management. Successful programs not only identified risk early on, but specific steps were defined for managing the risk once identified. The third common denominator consistently mentioned was project planning. Without incredible luck, no project can be successful without realistic and thorough up-front planning. To state the obvious, the better the planning, the more likely the outcome will match the plan.

Like most of you, I have my opinions on how to have a successful project. I would like to point you to what I view are some other critical elements of project success. Having served as both an acquirer and supplier of software, I can tell you that a key to success is sound systems engineering. Few projects can be truly successful if they do not take into account the many tentacles that are linked to a project. Suppliers and acquirers must work together to implement good systems engineering. Another element critical to a project's success is careful consideration in the planning phase to the availability of resources. The availability of key people, equipment, facilities, and many other project resources must be taken into account before committing to a schedule. One final element that the 76th Software Maintenance Group (SMXG) has found to be key to a project's success is project management. Managers must adequately manage day-to-day activities, ensure processes are followed, monitor progress, and communicate with the customer.

While I do not mean to imply that these three elements are the only elements of successful projects, I do believe they are among the most critical elements of success. Our track record here at the 76th SMXG is evidence that these elements have certainly contributed to our success. Our 325 software deliveries in the last 24 months have resulted in 100 percent on-time delivery performance. I hope you will take some of these lessons learned as well as the insights from this month's authors and apply them to your project.

We start this month with an article from Capers Jones on the social and technical reasons for project failure, followed by an entertaining article by Alan C. Jost on the importance of communication. Timothy K. Perkins discusses the conclusions of his independent research and how lack of knowledge or the application of that knowledge can lead to project failure. Quentin W. Fleming and Joel M. Koppelman suggest using a simplified version of earned value as a tool for project success. Our recently retired Walt Lipke continues to aid us with his article on statistical methods applied to Earned Value Management. Timothy G. Olson defines short and *usable* (emphasis added) processes. We conclude with Paul Kimmerly, who provides unique insight on how process improvement projects can actually help a project fail rather than help them succeed.

I trust these articles will help in alerting you to warning signs of potential weaknesses that can lead to project failure. I also hope they help you and your team implement successful processes for project success.

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